

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,594	09/23/2003	Takashi Nakazawa	NIL-198	9723
23353	7590 03/03/2004		EXAM	INER
RADER FISHMAN & GRAUER PLLC			FRIEDHOFER, MICHAEL A	
LION BUILDING 1233 20TH STREET N.W., SUITE 501		01	ART UNIT	PAPER NUMBER
WASHINGTON, DC 20036			2832	

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/667,594	NAKAZAWA ET AL			
Office Action Summary	Examiner	Art Unit			
	Michael A. Friedhofer	2832			
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep. If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on	·	v			
	is action is non-final.				
· · · —					
Disposition of Claims					
4) ☐ Claim(s) 1-4 is/are pending in the application. 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) 1 and 2 is/are allowed. 6) ☐ Claim(s) 3 and 4 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/	awn from consideration.				
Application Papers					
9)☐ The specification is objected to by the Examin	er.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the	• • • • • • • • • • • • • • • • • • • •				
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E					
Priority under 35 U.S.C. § 119					
12) ⊠ Acknowledgment is made of a claim for foreig  a) □ All b) □ Some * c) ⊠ None of:  1. ☑ Certified copies of the priority document  2. □ Certified copies of the priority document  3. □ Copies of the certified copies of the priority document application from the International Bureat*  * See the attached detailed Office action for a list	nts have been received.  Its have been received in Applicationity documents have been received in the control of the control o	on No ed in this National Stage			
Attachment(s)	0 🗖 1-4	(PTO 412)			
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date</li> </ol>	4) Interview Summary Paper No(s)/Mail Da  5) Notice of Informal P  6) Other:				

Application/Control Number: 10/667,594

Art Unit: 2832

#### **DETAILED ACTION**

## Specification

1. The abstract of the disclosure is objected to because the reference numerals must be in parentheses. Correction is required. See MPEP § 608.01(b).

## Claim Rejections - 35 USC § 112

2. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, it is unclear what it means when the "boldness" is changed. The use of "boldness" is unclear and vague making the claim indefinite.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Suwa.

Lin teaches in figures 2-6 a slide switch including a pole board 20 having fixed contacts 22,23; movable board 32 made of resin supporting a base portion 43 of a movable contact 41 capable of sliding a contact portion at a front end relative to the fixed contact. The base portion is fixedly supported by the movable board via insert-molding of the resin.

Art Unit: 2832

Lin does not disclose the use of a positioning hole in which a positioning pin located on the die is fitted during the insert-molding process.

Suwa teaches the use of positioning pins located on the mold or die for the purpose of positioning the contact within the die during the insert-molding process.

It would have been obvious to one of ordinary skill in the art to apply the teachings of Suwa to Lin to utilize a positioning hole and positioning pin during the insert molding process because this is for the purpose preventing deformation and shifting of the contact during the molding process.

#### Allowable Subject Matter

- 5. Claims –2 are allowed.
- 6. Claim 4 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 7. The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach or suggest the movable contact being insert molded into the movable board an being inclinedly supported by the movable board nor does the prior art teach or suggest changing the position of the movable contact by changing a position of the small diameter portion relative to the die by changing the boldness of the large diameter portion.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Marvet et al and Billman et al teach various switch structures utilizing insert molding techniques.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Friedhofer whose telephone number is 703-308-3304. The examiner can normally be reached on Mon-Fri 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 703-308-7619. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael A. Friedhofer Primary Examiner Art Unit 2832

maf